



## NASA's Aeronautics Test Program

# Support Aircraft

Dryden Flight Research Center's support aircraft provide versatile, safe platforms, which play a vital role in successful flight and ground operations.

Dryden's support fleet provide video, photo, and safety chase support for NASA, Department of Defense, Federal Aviation Administration, and other NASA-approved programs. The support aircraft are also utilized for pilot proficiency training, which ensures highly qualified, experienced, and capable research test pilots. Each type of aircraft in the fleet provides a unique capability, based on its performance characteristics, which meet the support requirements across the envelope of flight operations.





### Characteristics

Support aircraft	F-18	T-38	T-34C	B200 King Air
Seats	(2) two-seat and (2) single-seat	(2) two-seat	(1) two-seat	(2) multi-seat
Manufacturer	McDonnell Douglas	Northrop Corporation	Beech Aircraft	Beech Aircraft
Engine	Two GE F404 turbofans 17 700 pounds (8028.58 kg) of thrust	GE J85-5 axial-flow turbojets	550 hp PT6A-25 turboprop	Two 850-hp PT6A-42 turboprop
Top speed	Mach 1.7 (1190 mph)	Mach 1.08 at sea level and Mach 1.3 at 30 000 ft	280 kts	292 kts
Wing span	40 ft, 4 in. (12.29 m)	25 ft, 3 in.	33 ft, 4 in.	54 ft, 6 in.

### Safety Chase Support

While performing safety chase support, pilots maintain rebroadcast hot-mike and constant radio and visual contact with research test vehicles to ensure total flight safety during specific tests and maneuvers. These chase pilots monitor external flight-critical safety items, clear other aircraft operations, observe flight-control operations for the test pilot, and can provide additional real-time feedback to the test pilot and control room personnel.

### Photo and Video Support

Two-seat support aircraft are utilized for photo and video support. Photo and video technicians in these aircraft transmit live video back to control rooms so that project engineers can monitor the mission as it is flown ensuring the ability to make critical flight safety decisions if required. This capability greatly enhances existing ground-based long-range optic systems providing video and photo recording of research flight test accomplishments.

### Contact Information

[www.aeronautics.nasa.gov/atp](http://www.aeronautics.nasa.gov/atp)

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